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## Introduction:

When I think about exactly what I wanted my senior project to be I think about creating recipes. Of course this is what I did but there is so much more that came out of it. I have been reflecting back on everything I did and everything that happened over the course of my project.

It had always been in the back of my mind that I might want to do something with cooking and explore it in a new way, because it has been something I have always loved. Since I was little I have cooked and I even had a cupcake business with my best friend for a while at age 10. At first when it really became time to choose a project I wanted to pick something new and exciting that maybe I had never done before. I had a few ideas but none of them seemed very sustainable or possible for me to execute. As I thought about it more the idea of doing something with cooking kept coming up. So finally I decided that's what my topic needed to be. Then I had to narrow it down and actually come up with what my project would be under the topic of cooking and food.

I decided I wanted to focus on food relating to health in some way as this is something I am passionate about and hope to study more in the future. I also knew that I wanted a project that was more about doing than about researching. As I thought more, I settled on that creating a cookbook would be the right thing to do. I not only wanted to write my own recipes down, I wanted to create recipes that maybe were simple or common foods but using health conscious
alternative ingredients. This would tie into both my passion for cooking and my interest in food for health.

I did a lot of thinking about this idea before I came to the conclusion that I just really needed to start cooking in order to come up with a more solidified plan. I have learned throughout this project that I learn and accomplish things best through doing something. Once I start in on a task and stop thinking about it more ideas will come to me and I can take it further.

So once I decided that I would create a cookbook I started cooking. After cooking a few different times and reflecting on what my habits were when I did cook, I was able to narrow my plan and decide to use alternative ingredients and be more health conscious with my cooking. I also realized that I tend to bake and make sweet things more than I cook savory dishes. I wanted to have a good mixture of both savory and sweet in my cookbook so I knew this was going to be something I needed to work on.

As I worked on my project I had a few different opportunities come up through Ceres Community Project. I started assisting nutritionists teaching cooking/nutrition classes at local health clinics. I also helped with classes for kids at libraries. Lastly for my apprenticeship week in the winter I shadowed different doctors in alternative medicine careers. As part of one of my days at the apprenticeship I had the opportunity to participate in a nutrition class about healthy eating and habits. In this class it was mostly elderly people or people who just really wanted to eat healthier. Some of these people were recovering from a long time eating disorder or recovering from a heart attack or other health condition, but each one of them had a motivation to be there and learn as much as they could. This was very inspiring for me to see. Throughout the various classes I have assisted with I have been able to get to know some of the people and
share something I am passionate about with them. I am usually cooking the meal while everyone there helps to prepare it. As I cook the food the nutritionist gives a talk on some sort of nutrition topic. I am sharing my passion of cooking while also learning about a topic I am interested in. These classes have not only given me inspiration for my future but also for my project. I learn things about nutrition as well as get inspired by the food we are making for my own recipes.

## Process:

As I mentioned before as soon as I started to just launch straight into doing my project and not worry about the exact plan I was able to get much further. In the beginning I would get stressed about needing to have an exact plan so that I could execute and not take a step in the wrong direction. As I quickly learned I was not going to get anywhere without just starting somewhere.

The first day that I decided to just launch into the doing part of my project I felt so much excitement towards doing it. The first recipe I decided to create was just simple chocolate chip cookies. I knew it would be hard to go super wrong with cookies and of course I have made them so many times. The only differences this time was that I did not have the security of a recipe, I was not using ingredients that other recipes may have called for, and lastly I had to write down everything I did as well as measure every ingredient which I hardly ever do.

It was definitely a struggle for me to write everything I did down, especially when I had to go back and add more flour or add more liquid throughout the process, but I had so much fun with the ability to be creative. It was freeing to not have a recipe. I had before this baked without a recipe, but I usually at least consulted one before I started or had a basic one to reference.

In making the cookies I had to recall everything that is usually used in a cookie recipe, which wasn't that hard because I am familiar with how you make cookies, but then I had to decide what things I was going to substitute. I had to figure out which alternative sweetener to use in place of sugar and what kinds of flour I thought would make the best cookie. My first recipe turned out pretty good but I did end up making it another time to try and make the dough less soft. It was very interesting to try and figure out what I could do differently to improve it.

Over the course of my project and creating all my different recipes I learned pretty quickly what worked in certain situations and what didn't. For example things with almond flour are a lot denser and take a lot longer to bake whereas things with oat flour or other types of flour produce a much fluffier result. I had to work on choosing the right ingredients and the correct ratios of them as well.

Some recipes were harder than others to get a good result. For one of my recipes I made lemon bars where the crust did not turn out baked at all. It was soft and not much like a crust but it did taste good. For this particular recipe I had to go back and take out some of the liquid ingredients I used and replace them with other ingredients to make it more crust like. Sometimes it is not possible to create something exactly like it would be if you used other ingredients but you can still get a yummy result.

Baking is a lot harder to get exactly right, because it is more of a science than cooking. In cooking I found it easier to add things to it if it didn't quite turn out right. It also proved easier to get a good result in cooking.

## Research:

As I mentioned before, a big part of my project was creating recipes without certain ingredients. The two main ingredients I chose to leave out are refined white sugar and flour. These are ingredients that are especially common in baked goods but are used in most everything. I have of course used them in cooking a lot, but wanted to challenge myself to create a good result without them. There were other things that I challenged myself to do like making everything gluten free and most things dairy free or vegan, but sugar and white flour were the two main things I excluded.

Everyone knows or has heard that sugar is bad for you. I have done minimal research and it has been explained to me several times over the years, but I wanted to do my own research and really learn scientifically why it is not good for us and why alternatives are healthier.

## Refined vs Natural Sugars:

Refined sugar is products like high fructose corn syrup and regular white sugar. Natural or alternative sweeteners are products like honey, coconut sugar, maple syrup, or stevia. There are many similarities and differences in these two groups of sugars. The main difference is how it is processed, which will directly affect it being better or worse for your health.

Refined sugars are taken out of plants that they naturally occur in and then processed until they reach a pure sugar form (sucrose). It mainly comes from sugarcane or sugar beets. These are the kinds of sugar that is added to most everything to enhance flavor and preserve. Because they are highly processed they are extremely low in any sort of nutrients. Natural sugars are sugars that naturally occur without having to extract and process them, like sugar in fruits (fructose). These sugars come with much more nutrients in them because they are not being extremely refined. The amount of other nutrients in them affects how your body uses them.

No matter the type of sugar it is, it breaks down from a carbohydrate to glucose in the body. The difference in types of sugar is the pace at which it is processed. Natural sugars are processed slowly and satisfies you for a longer period of time. They come along with fiber from fruit or proteins from dairy which also slows the process. Refined sugars are processed very quickly, causing your blood sugar and insulin levels to spike. The result of them being metabolised so fast is that you will continue to consume them because you do not feel full. Then there will be an overload of sugar that your body cannot use properly so it will turn to fat. Both refined and natural sugars are both sugars when entering the body so neither are super healthy, but natural sugars are better for you because they are not just empty calories that spike your blood sugar. Too much of either kind will cause health issues such as heart disease, diabetes, and obesity. According to the American Heart Association the amount of added sugar that should be consumed daily is not more than six teaspoons for women and nine for men, which is 100 calories and 150 calories (American Heart Association). This doesn't sound like a lot if you just think about it as eating six or nine teaspoons of sugar daily, but when you look at how much sugar is in things you usually eat everyday it adds up very quickly. For example drinking one can of coke has nine and three-quarters teaspoons of sugar which is already more than anyone should be consuming in a day.

Sugar is overall not bad for you, as long as it is consumed in moderation. It is extremely hard to consume refined sugars in moderation because of how much of them is added to things, so choosing to eat natural sugars over refined sugars is probably a better option. In conclusion sugar is something that can be very detrimental to your health when consumed in excess but we do need a little bit of it to have energy. There is a difference between sugar in things like fruits,
dairy, and carbs, and added sugars. You get enough sugar for your body just eating things with natural sugar, so it is important to limit all sugar intake.

## Challenges/Reflections On What I Learned:

A few times throughout the process of my project I would lose inspiration for what I wanted to make next. I would go a few weeks without making something or I would just not be motivated to do anything. I was always able to find inspiration again though, whether it was by scrolling through pinterest and looking at delicious looking dishes or helping out at another class and being inspired by the flavors used in that week's meal. As I continued on with my project I started a list of my ideas of what I wanted to try next. Ideas would come to me at random times and I didn't want to forget them so I would write them down. Sometimes it was a certain thing I wanted to recreate and sometimes it was just an ingredient I wanted to try out or a pairing of foods I wanted to try. This also gave me something to do during the times I wasn't feeling inspired to make something I could look at my list and try something from it.

Another challenge I ran into was trying to develop my project in a way I didn't want it to go. I spent a lot of time trying to come up with what else I could do and where else I could take my project, which took away from me actually getting things done and focusing on what I was actually doing. Once I would just decide to forget about having an exact plan for where it was going I would immediately feel more creative and satisfied with what I had done so far. I learned
that how I have the most progress is through just taking action and the ideas and solutions to problems will come out of that.

Of course the biggest things I learned were about cooking and baking. I further developed a sense of proportions in baking, and a general sense of what ingredients go better in certain recipes. I started this project with a good amount of experience in the kitchen, but I have definitely come away with a stronger understanding of baking and cooking. I understand better how proportions work in baking and how important it is to get them right. This came from trial and error in creating my own recipes and proportions. I think this is a sense that has to be developed with experience and practice which is exactly what I got.

When I first wanted to do this project I thought of it as creating a cookbook and that I would actually create a book by the end of the project. This isn't a bad idea and I may still do it with the recipes I have created so far, but I haven't yet because I don't feel like this is a project I will be finished with ever. I think this project really gave me a good foundation to work off of for the rest of my life when I cook. I think I will probably continue creating more of my own recipes throughout my life and I want to leave this project open instead of finishing a book.

Several different resources helped me along the process of this project. First my family helped me a lot by eating all of my creations and giving me feedback even if they didn't have any right away to give. I had several opportunities to talk to people in the field of nutrition and cooking and have conversations with them about either my project or just going into the field of nutrition in general. These people include but are not limited to Sandra Tafur, Mariette Leufkens, Sara McCamant, and a few others. Towards the end of my project I also had Ronni Sands to talk to a lot about different ideas I had and to hear her ideas as well. This helped to think things
through and have a person to report to about my progress. Of course one of the biggest inspirations I had came from the classes I have been assisting at through Ceres Community Project, in the community because I am learning about nutrition while also teaching about cooking to others.

My paper would not show a complete process of this project without mentioning Ceres more in depth, because this is where probably most of my inspiration for this project has come from. I have volunteered at Ceres for about five years now, and currently am hired part time during the pandemic. Over the years I have had so many opportunities through Ceres to develop my cooking skills, nutritional knowledge, work in the catering business, and many other things such as leadership and working with a team. All of these things have helped me at some point during this project. I was able to have a lead role in planning and executing the menu for the green teams solar fundraiser brunch earlier this year, which gave me experience cooking for a group of about 100 people, and to put some of my recipes to use.

I am so grateful to all of the different people who had any part in my project, whether it was just a conversation, testing my creations, or giving me ideas. I know that this project isn't really ever going to have an end because I will continue to cook and create my own recipes throughout my life, but I was able to develop skills and set a great foundation.

# List of Recipes: 

Almond Flour Choc. Chip Cookies<br>Chia Pudding<br>Date Caramel Oat Bars<br>Lemon Bars<br>Almond Coconut Bars<br>Cinnamon Apple or Fig Muffins<br>Energy Balls<br>\section*{Frittata}<br>Vegan Masala<br>Miso Tofu Bowls<br>Veggie Bean Patties<br>Quinoa Salad<br>Veggie Stir Fry



This is a picture of the frittata recipe I created. It was served at the solar fundraiser brunch in January, but this is a picture from when I made it at home.


These are the chocolate chip cookies I made as my first recipe.

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## Appendix

The full collection of the recipes I created throughout my project.

## Almond Flour Choc. Chip Cookies

## Ingredients:

1 cup butter
3/4 cup coconut sugar
1 egg
1 tsp Vanilla
1 tsp Baking powder
1 1/2 cup almond flour
1 cup oats
3/4 cup pecans
3/4 cup chocolate

## Instructions:

Preheat the oven to 350.
Place butter and coconut sugar into mixer bowl and whip until slightly fluffy.
Add egg and vanilla while on medium speed.
Then add the baking powder, almond flour and oats. Mix just until combined.
Add pecans and chocolate and mix just until incorporated.
Place spoonfuls of dough onto a baking sheet and flatten.
Bake for about 15 minutes and let cool.

## Chia pudding

Ingredients:
1 cup milk (coconut and almond combo)
2 tbsp maple syrup
1/2 tsp vanilla
1/4 cup chia seeds
Fruit, cocoa nibs, cocoa powder, coconut, etc for topping

## Instructions:

Mix milk, maple syrup, and vanilla in a container.
Whisk in chia seeds, adding them slowly.
Put into fridge and let sit overnight.
Then top with toppings.

## Date caramel oat bars:

## Ingredients:

1 cup Oats
$1 / 2$ cup Almond flour
$1 / 4$ cup Date syrup
$1 / 4$ cup Honey
$1 / 4$ cup Coconut sugar
1 tsp Salt
1 tsp Vanilla
$1 / 2$ tsp Baking soda
3 tbsp Coconut oil
1 tsp Cinnamon

## Date Caramel:

1 cup Dates
2 tsp Vanilla
$1 / 2$ tsp Salt
Almond milk to thin. About 2 tbsp
$1 / 2$ cup Walnuts chopped

## Instructions:

Preheat the oven to 350 and grease a square baking dish.
Combine the first section of ingredients in a medium bowl and mix until combined.
Next combine dates, vanilla salt, and almond milk in a blender and blend until it is a smooth caramel consistency.

Start by pressing the oat mixture to the bottom of the pan.
Then pour the caramel over it, and lastly sprinkle on the chopped walnuts.
Bake for about 30 minutes.

## Lemon bars

## Ingredients:

For Crust:
1 cup almond flour
1/2 cup oat flour
1/4 cup coconut sugar
2 tbsp coconut oil
1 tbsp maple syrup

For Filling:
3 eggs 1 yolk
2/3 cup lemon juice
1 tbsp zest
Lemon extract
1/2 cup maple syrup
2 tbsp oat flour

## Instructions:

Preheat oven to 350 . Oil a square baking pan.
Place the two flours and coconut sugar in a mixing bowl or food processor, mix until combined.

Add wet ingredients and stir.
Then press mixture into the bottom of the pan, and bake for 15 mins.
While it is baking mix all filling ingredients in a mixing bowl.
Pour filling over crust and bake for about 20 minutes or until it doesn't jiggle.
Chill before serving.

## Almond Coconut Bars

## Ingredients:

$1 / 2$ cup dark chocolate or chocolate chips
$1 / 8$ cup coconut oil
$1 / 4$ cup toasted chopped almonds
$3 / 4$ cup shredded coconut
$1 / 4$ cup coconut oil
2 tbsp maple syrup

Toasted almonds and drizzled chocolate on top

## Instructions:

Line a square pan with parchment paper or use silicone baking cups.
Melt coconut oil and chocolate in a small saucepan.
Toast almonds and chop.
Set aside a bit of the chocolate and nuts for topping.
Pour chocolate mixture into bottom of pan or into each cup, and sprinkle almonds on top.
Place in freezer for about 10 minutes or until it starts to harden but is not fully hardened on the top.
While it is in the freezer mix coconut, coconut oil, and maple syrup together until fully combined.

Remove pan from freezer, and press the coconut mixture on top of the chocolate and nut layer evenly.
Sprinkle the leftover nuts and drizzle chocolate on top.
Place back in freezer for about 15 mins, then store in fridge.

## Muffins

## Ingredients:

2 very ripe bananas
1 tsp cinnamon
1 tsp vanilla
1/4 cup date syrup
1/2 tsp salt
1 tsp baking powder
1/4 cup coconut sugar
1/4 cup coconut oil, melted
Chia or flax egg (1 tbsp flax meal or chia, 2 tbsp water)
1 cup almond flour
1/4 cup tapioca flour
1/2 cup oat flour
One apple diced (about $3 / 4$ cup)

## Instructions:

Preheat oven to 350 degrees. Line muffin cups with liners.
Stir together flax or chia with water and let it sit for about 10 mins.
Place bananas into a mixing bowl and mash with a fork.
Add cinnamon, vanilla, date syrup, salt, baking powder, coconut sugar, coconut oil, and flax egg. Stir until combined well.
Add flours just until incorporated.
Then mix in apples.
Scoop into muffin cups and bake for 25 mins.

## Energy Balls

Ingredients:
1/2 cup toasted almonds
1/4 cup toasted sesame seeds
7 pitted dates (more for sweeter)
$1 / 4$ cup sunflower seed butter or other
2 tsp maca powder
2 tbsp water
1/4 cup coconut to roll balls in
Makes 12 balls

## Instructions:

Place almonds and sesame seeds in food processor and process until finely ground.
Add the dates and pulse until combined.
Then add nut butter, maca powder, and water process until it forms a dough.
Roll small amounts of the mixture into balls and roll in coconut.
Place in fridge for about 30 mins.

## Frittata

## Ingredients:

8 eggs
1 1/2 cup of veg: peppers, broccoli, onion, kale
1/2 cup cheese
Salt
Pepper
Garlic

## Instructions:

Start by chopping all vegetables and either roasting or sauteing all with olive oil salt and pepper.

Preheat oven to 375 .
Whisk eggs in a large bowl and add salt, pepper, and garlic.
Add the vegetables and mix until combined.
Pour mixture into prepared pan and sprinkle cheese on top.
Bake for about 30 mins.

## Miso Tofu Bowls

## Ingredients:

1 block tofu, patted dry
$1 / 8$ cup liquid aminos
2 tbsp miso
3 tbsp honey
2 tsp sesame oil
1 tsp ginger, minced
2 cloves garlic, minced
2 tbsp water
2 drops chili oil (optional)
1 tsp arrowroot powder (if wanted thicker)
3tbsp Sesame seeds
Serve with rice and veggies

## Instructions:

Slice tofu into cubes, and place in a pan with sesame oil.
Cook turning over occasionally until brown on all sides.
While the tofu is cooking whisk together all other ingredients.
Add the sauce to the pan and simmer for about 10 minutes until the tofu is nicely coated.

Serve over rice and veggies.

## Veggie Bean Patties

## Ingredients:

1 can garbanzo beans
Salt
Pepper
1 tsp garlic powder
1 tsp Cumin
$11 / 2$ tsp chile powder
1 bell pepper, small dice
1 zucchini, grated
1 onion, diced
Spices from above (same measurements)
1 can black beans
Olive oil for pan
Can add egg or quinoa to hold together better

## Instructions:

In a food processor blend garbanzo beans with the spices.
Saute onion with the spices until translucent.
Add the onions, bean mixture, zucchini, and pepper into a bowl and mix until combined.
Put black beans onto a plate or cutting board and use the bottom of a glass to smoosh them, not all the way just until they are not whole.

Add beans to bowl and mix.
Form balls of the mixture and put onto oiled pan, flatten into a patty shape.
Let cook about 10 mins on each side.
Remove from pan and serve warm.

## Quinoa Salad

Ingredients:
1 cup dry Quinoa
2 cups Spinach
$1 / 2$ cup Goat cheese
$1 / 2$ cup Walnuts, chopped
$1 / 2$ cup Cranberries
3 tbsp Olive oil

## Instructions:

Cook quinoa according to instructions. And set aside to cool partially.
Combine quinoa and spinach in a large bowl. Mix until the spinach is slightly wilted.
Then add the remaining ingredients.

## Veggie Stir Fry

## Ingredients:

1 small onion, diced
1 medium carrot, sliced thinly
1 bell pepper, sliced
1 head of bok choy, chopped
3 tbsp liquid aminos or soy sauce
Sesame oil
3 tbsp sesame seeds
Thin rice noodles, cooked

## Instructions:

Saute onions with sesame oil in a large pan, until translucent.
Add carrots and peppers and cook about 5 mins, then add bok choy.
Add the liquid aminos and sesame oil and continue cooking until the veggies are cooked to desired tenderness.

When finished cooking add sesame seeds.
Serve with rice noodles.

